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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,939	08/05/2003	Richard Hull	B-5191 621140-5	8858

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EXAMINER	
DESIR, PIERRE LOUIS	

ART UNIT	PAPER NUMBER
2681	

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/635,939	HULL ET AL.	
	Examiner	Art Unit	
	Pierre-Louis Desir	2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/09/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. Claims 1-3, 5-20, 22-33 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4-5, 12-15, 17-26, 28-29, 37-39, 41-49 of copending Application No. 10/635940. Although the conflicting claims are not identical, they are not patentably distinct from each other because the conflicting claims have not in fact been patented.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-8, 15-24, 31-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Kabala, U.S. Patent No. 6539393.

Regarding claim 1, Kabala discloses a method of providing information about a real-world space, comprising the steps of: (a) as each of multiple users moves through said space, virtual markers are deposited and stored to indicate associated locations visited by the user in the space (i.e., when each attendee walks or attends different booths of the trade show, transceivers

in each booth receives identification code of the badge carried by the attendee. The identification information, the signal strength of the signals received from the badges, are forwarded by the transceivers to the central processor to process and sort the information into which of the transceivers were visited by the badge) (see fig. 1, col. 4, lines 52-63); (b) the virtual markers deposited in respect of said multiple users are aggregated, in dependence on their associated locations, either when being stored or subsequently (i.e., the central processor retrieves the information entered by operators when the attendees registered for the show to archive a list having identity of the attendees, the places of booths visited (location of the booth), the times and duration of the visits) (see fig. 1, col. 4, lines 63-67); and (c) data about the aggregated markers is used to provide information relevant to use of the space (see col. 7, lines 63-67).

Regarding claim 2, Kabala discloses a method (see claim 1 rejection) wherein a plurality of storage location cells are provided that correspond to respective areas of said space (i.e., a plurality of transceivers modules cover different areas) (see fig. 2, col. 7, lines 22-24), the virtual markers having associated strength values (i.e., signal strength of the signals received from the badges are forwarded by the transceivers to the central processor) (see col. 4, lines 57-59) and each marker being stored and aggregated by having its strength value added to an existing aggregated strength value, if any, stored in the location cell that corresponds to the area covering the location associated with the marker (i.e., the transceivers in each booth received (and inherently stored) the signal strength of the signals received from the badges (col. 4, lines 53-59). It is worth to note that the portable transceivers collect the identification code, which includes the signal strength, of the attendees that are attending the booth of the trade show (see abstract).

Regarding claim 3, Kabala discloses a method (see claim 2 rejection) wherein the storage and aggregation of a said marker involves, in addition to increasing the aggregated strength value of the corresponding location cell by the strength value of the marker (see claim 2 rejection), increasing by a lesser amount the aggregated strength value of at least one location cell covering a said area adjacent to the area covering the location associated with the marker (i.e., the signal strength information is used to decipher which of the neighboring transceivers received a stronger transmission from the same badge. Central processor interprets the stronger signal strength level information as the closer of the two transceivers to the attendee) (see col. 5, lines 18-21).

Regarding claim 4, Kabala discloses a method (see claim 1 rejection) wherein the individual markers that have been deposited are retained after marker aggregation in step (b) (i.e., the central processor includes stored program and associated memory for processing and time stamping the received packets) (see col. 5, lines 33-35), the markers deposited in respect of at least one user including information associating together those markers whereby to enable the trail taken by the user through the space to be determined (i.e., the received packets are processed and time stamped to track each attendee) (see col. 5, lines 33-36).

Regarding claim 5, Kabala discloses a method (see claim 1 rejection) wherein said virtual markers are deposited automatically at one of: predetermined intervals of time (see col. 5, lines 1-5).

Regarding claim 6, Kabala discloses a method (see claim 1 rejection) wherein the said virtual markers deposited in respect of each user are deposited by a mobile device carried by the user (i.e., portable wireless transmitters for transmitting identification code) (see abstract).

Regarding claim 7, Kabala discloses a method (see claim 6 rejection) wherein the virtual markers are stored in a central system (i.e., the system comprises memory for storing a list of the wireless transmitters, its identification code) (see col. 3, lines 13-16).

Regarding claim 8, Kabala discloses a method (see claim 1 rejection) wherein the said virtual markers are deposited and stored by an infrastructure system that monitors the locations of the users (i.e., central processor) (see abstract).

Regarding claim 15, Kabala discloses a method (see claim 1 rejection) wherein the virtual marker is deposited when the user reaches a location corresponding to a feature of interest in the space (see col. 5, lines 50-55), step (c) involving using the aggregated marker data concerning such features to provide information about their popularity (see fig. 6, col. 9, lines 18-22).

Regarding claim 16, Kabala discloses a method (see claim 1 rejection) wherein in step (a) a said virtual marker is deposited upon a said user requesting, whilst at a location corresponding to a feature of interest in the space, to be presented with a media item concerning that feature space (i.e., when each attendee walks or attends different booths of the trade show, transceivers in each booth receives identification code of the badge carried by the attendee. The identification information, the signal strength of the signals received from the badges, are forwarded by the transceivers to the central processor to process and sort the information into which of the transceivers were visited by the badge. Thus, when the attendee attends a booth, the attendee inherently requests information related to that booth) (see fig. 1, col. 4, lines 52-63); step (c) involving using the aggregated marker data concerning such features to provide information about their popularity (see fig. 6, col. 9, lines 18-22).

Regarding claim 17, Kabala discloses a method (see claim 1 rejection) wherein step (c) is effected for a further user moving through the space with the information being provided to that user (i.e., when attendee moves to another booth, the corresponding transceiver in that booth will pick up its badge ID signal and will be seen by central processor when the respective transceiver is interrogated) (see col. 6, lines 13-22).

Regarding claim 18, Kabala discloses an apparatus for providing information about a real-world space, the apparatus comprising: a first arrangement arranged to deposit and store virtual markers to indicate associated locations visited by each of multiple users in the space (see fig. 1, col. 4, lines 52-63); a second arrangement arranged to aggregate the virtual markers deposited in respect of said multiple users, in dependence on their associated locations, either when the markers are being stored or subsequently (i.e., the central processor retrieves the information entered by operators when the attendees registered for the show to archive a list having identity of the attendees, the places of booths visited (location of the booth), the times and duration of the visits) (see fig. 1, col. 4, lines 63-67); and a third arrangement arranged to use data about the aggregated markers to provide information relevant to use of the space (see col. 7, lines 63-67).

Regarding claim 19, Kabala discloses an apparatus (see claim 18) wherein the first arrangement comprises a plurality of storage location cells that correspond to respective areas of said space (i.e., a plurality of transceivers modules cover different areas) (see fig. 2, col. 7, lines 22-24), the first arrangement being arranged to associated strength values with the virtual markers values (i.e., signal strength of the signals received from the badges are forwarded by the transceivers to the central processor) (see col. 4, lines 57-59), and the first and second

arrangements together being arranged to store and aggregate each deposited marker by having its strength value added to an existing aggregated strength value, if any, stored in the location cell that corresponds to the area covering the location associated with the marker (i.e., the transceivers in each booth received (and inherently stored) the signal strength of the signals received from the badges (col. 4, lines 53-59). It is worth to note that the portable transceivers collect the identification code, which includes the signal strength, of the attendees that are attending the booth of the trade show (see abstract).

Regarding claim 20, Kabala discloses an apparatus (see claim 19 rejection) wherein the first and second arrangements are together arranged, when storing and aggregating a said marker, not only to increase the aggregated strength value of the corresponding location cell by the strength value of the marker (see claim 19 rejection), but also to increase by a lesser amount the aggregated strength value of at least one location cell covering a said area adjacent to the area covering the location associated with the marker (i.e., the signal strength information is used to decipher which of the neighboring transceivers received a stronger transmission from the same badge. Central processor interprets the stronger signal strength level information as the closer of the two transceivers to the attendee) (see col. 5, lines 18-21).

Regarding claim 21, Kabala discloses an apparatus (see claim 18 rejection) wherein the first arrangement is arranged to retain the individual markers after marker aggregation by the second arrangement (i.e., the central processor includes stored program and associated memory for processing and time stamping the received packets) (see col. 5, lines 33-35), the first arrangement being further arranged to associate with markers deposited in respect of at least one user information associating together those markers whereby to enable the trail taken by the user

through the space to be determined (i.e., the received packets are processed and time stamped to track each attendee) (see col. 5, lines 33-36).

Regarding claim 22, Kabala discloses an apparatus (see claim 18 rejection) wherein the first arrangement comprises mobile devices intended to be carried by said multiple users (i.e., portable wireless transmitters) (see abstract), each mobile device being arranged to deposit said virtual markers in respect of a said user carrying the device (i.e., portable wireless transmitters for transmitting identification code) (see abstract).

Regarding claim 23, Kabala discloses an apparatus (see claim 22 rejection) wherein the first arrangement further comprises a central system for storing the virtual markers deposited by the mobile devices (i.e., the system comprises memory for storing a list of the wireless transmitters, its identification code) (see col. 3, lines 13-16).

Regarding claim 24, Kabala discloses an apparatus (see claim 18 rejection) wherein the first arrangement comprises an infrastructure system arranged to monitors the locations of the users and to deposit and store said virtual markers (i.e., central processor) (see abstract).

Regarding claim 31, Kabala discloses an apparatus (see claim 18 rejection) wherein the first arrangement is arranged to deposit a said virtual marker whenever a said user reaches a location corresponding to a feature of interest in the space (see col. 5, lines 50-55), the third arrangement being arranged to use the aggregated-marker data concerning such features to provide information about their popularity (see fig. 6, col. 9, lines 18-22).

Regarding claim 32, Kabala discloses an apparatus (see claim 18 rejection) wherein the first arrangement is arranged to deposit a said virtual marker upon determining that a said user is at a location corresponding to a feature of interest in the space and has requested to be presented

with a media item concerning that feature (i.e., when each attendee walks or attends different booths of the trade show, transceivers in each booth receives identification code of the badge carried by the attendee. The identification information, the signal strength of the signals received from the badges, are forwarded by the transceivers to the central processor to process and sort the information into which of the transceivers were visited by the badge. Thus, when the attendee attends a booth, the attendee inherently requests information related to that booth) (see fig. 1, col. 4, lines 52-63), the third arrangement being arranged to use aggregated-marker data concerning such features to provide information about their popularity (see fig. 6, col. 9, lines 18-22).

Regarding claim 33, Kabala discloses an apparatus, wherein the third arrangement comprises a mobile device for enabling a further user in said space to request and be presented with said information (i.e., when attendee moves to another booth, the corresponding transceiver in that booth will pick up its badge ID signal and will be seen by central processor when the respective transceiver is interrogated) (see col. 6, lines 13-22).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 9 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kabala in view of Dempsey, Pub. No. US 20020165731.

Regarding claim 9, Kabala discloses a method as described above (see claim 1 rejection).

Although Kabala discloses a method as described, Kabala does not specifically disclose a method wherein step (c) comprises presenting, as said information, an image of a virtual landscape formed by the location-dependent aggregations of markers mapped to a representation of the space.

However, Dempsey discloses a method wherein a location-determining module sends the current location of the attendee to the attendee display location where it is displayed on a map of the tradeshow floor (see page 5, paragraph 30).

Therefore, it would have been obvious to one of ordinary skill in the art to combine both teachings to arrive at the claimed invention. A motivation for doing so would have been to have a method capable of determining the current location of a tradeshow attendee (see page 5, paragraph 30).

Regarding claim 25, Kabala discloses an apparatus as described above (see claim 18 rejection).

Although kabala discloses an apparatus as described Kabala does not specifically discloses an apparatus wherein the third arrangement is arranged to present, as said information, an image of a virtual landscape formed by the location-dependent aggregations of markers mapped to a representation of the space.

However, Dempsey discloses an apparatus wherein a location-determining module sends the current location of the attendee to the attendee display location where it is displayed on a map of the tradeshow floor (see page 5, paragraph 30).

Therefore, it would have been obvious to one of ordinary skill in the art to combine both teachings to arrive at the claimed invention. A motivation for doing so would have been to have

a method capable of determining the current location of a tradeshow attendee (see page 5, paragraph 30).

6. Claims 10-14, 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kabala in view of Chu et al. (Chu) Pub. No. US 20020174021.

Regarding claims 10, Kabala discloses a method as described above (see claim 1 rejection).

Although Kabala discloses a method for collecting location data within a facility (see col. 2, lines 42-43) wherein the information comprises information about a path through the space (i.e., location of the objects or persons traveled within the facility) (see col. 2, lines 55-56), Kabala does not specifically disclose a method wherein the information being derived by using the marker aggregation data to determine a path that follows ridges in a virtual landscape formed by the location-dependent aggregations of markers.

However, Chu discloses a method wherein an optimized path is automatically computed based upon particular items in an inventory (see abstract), wherein the computed path may be consulted while the user follows the path (see paragraph 28). Thus, one skilled in the art would immediately comprehend as the marker being deposited, the information is being used to determine location information, which inherently may be path that follows or avoids certain directions including ridges troughs.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to facilitate the traffic flow of the attendee within the facility.

Regarding claim 11, Kabala discloses a method as described above (see claim 1 rejection).

Although Kabala discloses a method for collecting location data within a facility (see col. 2, lines 42-43) wherein the information comprises information about a path through the space (i.e., location of the objects or persons traveled within the facility) (see col. 2, lines 55-56), Kabala does not specifically disclose a method wherein the information being derived by using the marker aggregation data to determine that follows troughs in a virtual landscape formed by the location-dependent aggregations of markers.

However, Chu discloses a method wherein an optimized path is automatically computed based upon particular items in an inventory (see abstract), wherein the computed path may be consulted while the user follows the path (see paragraph 28). Thus, one skilled in the art would immediately comprehend as the marker being deposited, the information is being used to determine location information, which inherently may be path that follows or avoids certain directions including ridges troughs.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to facilitate the traffic flow of the attendee within the facility.

Regarding claim 12, Kabala discloses a method as described above (see claim 1 rejection).

Although Kabala discloses a method for collecting location data within a facility (see col. 2, lines 42-43) wherein the information comprises information about a path through the space (i.e., location of the objects or persons traveled within the facility) (see col. 2, lines 55-56),

Kabala does not specifically disclose a method wherein the information being derived by using the marker aggregation data to determine that avoids ridges in a virtual landscape formed by the location-dependent aggregations of markers.

However, Chu discloses a method wherein an optimized path is automatically computed based upon particular items in an inventory (see abstract), wherein the computed path may be consulted while the user follows the path (see paragraph 28). Thus, one skilled in the art would immediately comprehend as the marker being deposited, the information is being used to determine location information, which inherently may be path that follows or avoids certain directions including ridges troughs.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to facilitate the traffic flow of the attendee within the facility.

Regarding claim 13, Kabala discloses a method as described above (see claim 1 rejection).

Although Kabala discloses a method for collecting location data within a facility (see col. 2, lines 42-43) wherein the information comprises information about a path through the space (i.e., location of the objects or persons traveled within the facility) (see col. 2, lines 55-56), Kabala does not specifically disclose a method wherein the information being derived by using the marker aggregation data to determine that avoids troughs in a virtual landscape formed by the location-dependent aggregations of markers.

However, Chu discloses a method wherein an optimized path is automatically computed based upon particular items in an inventory (see abstract), wherein the computed path may be

consulted while the user follows the path (see paragraph 28). Thus, one skilled in the art would immediately comprehend as the marker being deposited, the information is being used to determine location information, which inherently may be path that follows or avoids certain directions including ridges troughs.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to facilitate the traffic flow of the attendee within the facility.

Regarding claim 14, Kabala discloses a method as described above (see claim 1 rejection).

Although Kabala discloses a method as described above, Kabala does not specifically disclose a method wherein step (c) involves using the aggregated marker data to predict a next location for a further user moving through the space having regard to that user's current location, this predicted next location then being used to provide to a mobile device of the further user, as said information, either the identify of media items associated with that predicted next location or the items themselves.

However, Chu discloses a method wherein a shopping path is recomputed using the user current location as a starting point, wherein the computed list anticipates the user next location for purchasing or identifying a specific item (see page 6, paragraph 59).

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to provide to the user updated information as the user move through the facility.

Regarding claim 26, Kabala discloses an apparatus as described above (see claim 18 rejection).

Although kabala discloses an apparatus for collecting location data within a facility (see col. 2, lines 42-43) wherein the third arrangement is arranged to derive information about a path through the space by using the marker aggregation data (i.e., location of the objects or persons traveled within the facility) (see col. 2, lines 55-56), Kabala does not specifically disclose an apparatus wherein the information being derived by using the marker aggregation data to determine a path that follows ridges in a virtual landscape formed by the location-dependent aggregations of markers.

However, Chu discloses an apparatus wherein an optimized path is automatically computed based upon particular items in an inventory (see abstract), wherein the computed path may be consulted while the user follows the path (see paragraph 28). Thus, one skilled in the art would immediately comprehend as the marker being deposited, the information is being used to determine location information, which inherently may be path that follows or avoids certain directions including ridges troughs.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to facilitate the traffic flow of the attendee within the facility.

Regarding claim 27, Kabala discloses an apparatus as described above (see claim 18 rejection).

Although kabala discloses an apparatus for collecting location data within a facility (see col. 2, lines 42-43) wherein the third arrangement is arranged to derive information about a path

through the space by using the marker aggregation data (i.e., location of the objects or persons traveled within the facility) (see col. 2, lines 55-56), Kabala does not specifically disclose an apparatus wherein the information being derived by using the marker aggregation data to determine a path that follows troughs in a virtual landscape formed by the location-dependent aggregations of markers.

However, Chu discloses an apparatus wherein an optimized path is automatically computed based upon particular items in an inventory (see abstract), wherein the computed path may be consulted while the user follows the path (see paragraph 28). Thus, one skilled in the art would immediately comprehend as the marker being deposited, the information is being used to determine location information, which inherently may be path that follows or avoids certain directions including ridges troughs.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to facilitate the traffic flow of the attendee within the facility.

Regarding claim 28, Kabala discloses an apparatus as described above (see claim 18 rejection).

Although kabala discloses an apparatus for collecting location data within a facility (see col. 2, lines 42-43) wherein the third arrangement is arranged to derive information about a path through the space by using the marker aggregation data (i.e., location of the objects or persons traveled within the facility) (see col. 2, lines 55-56), Kabala does not specifically disclose an apparatus wherein the information being derived by using the marker aggregation data to determine a that avoids ridges in a virtual landscape formed by the location-dependent

aggregations of markers.

However, Chu discloses an apparatus wherein an optimized path is automatically computed based upon particular items in an inventory (see abstract), wherein the computed path may be consulted while the user follows the path (see paragraph 28). Thus, one skilled in the art would immediately comprehend as the marker being deposited, the information is being used to determine location information, which inherently may be path that follows or avoids certain directions including ridges troughs.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to facilitate the traffic flow of the attendee within the facility.

Regarding claim 29, Kabala discloses an apparatus as described above (see claim 18 rejection).

Although kabala discloses an apparatus for collecting location data within a facility (see col. 2, lines 42-43) wherein the third arrangement is arranged to derive information about a path through the space by using the marker aggregation data (i.e., location of the objects or persons traveled within the facility) (see col. 2, lines 55-56), Kabala does not specifically disclose an apparatus wherein the information being derived by using the marker aggregation data to determine a path that avoids troughs in a virtual landscape formed by the location-dependent aggregations of markers.

However, Chu discloses an apparatus wherein an optimized path is automatically computed based upon particular items in an inventory (see abstract), wherein the computed path may be consulted while the user follows the path (see paragraph 28). Thus, one skilled in the art

would immediately comprehend as the marker being deposited, the information is being used to determine location information, which inherently may be path that follows or avoids certain directions including ridges troughs.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to facilitate the traffic flow of the attendee within the facility.

Regarding claim 30, Kabala discloses an apparatus as described above (see claim 18 rejection).

Although Kabala discloses an apparatus as described above, Kabala does not specifically disclose a method wherein the third arrangement is arranged to use the aggregated marker data to predict a next location for a further user moving through the space having regard to that user's current location, the third arrangement being further arranged to use the predicted next location to provide to a mobile device of the further user, as said information, either the identify of media items associated with that predicted next location or the items themselves.

However, Chu discloses an apparatus wherein a shopping path is recomputed using the user current location as a starting point, wherein the computed list anticipates the user next location for purchasing or identifying a specific item (see page 6, paragraph 59).

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to provide to the user updated information as the user move through the facility.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Louis Desir whose telephone number is 703-605-4312. The examiner can normally be reached on (571) 272-7799.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pierre-Louis Desir
AU 2681
06/21/2005

JEAN GELIN
PRIMARY EXAMINER